

REVISED VERSION

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
26 July 2001 (26.07.2001)

PCT

(10) International Publication Number  
WO 01/53312 A1(51) International Patent Classification<sup>7</sup>: C07H 21/04,  
C12N 15/11, 15/63, 15/70, 15/82, 15/85, C07K 14/00

(21) International Application Number: PCT/US00/34263

(22) International Filing Date:  
26 December 2000 (26.12.2000)

(25) Filing Language: English

(26) Publication Language: English

## (30) Priority Data:

09/471,275	23 December 1999 (23.12.1999)	US
09/488,725	21 January 2000 (21.01.2000)	US
09/552,317	25 April 2000 (25.04.2000)	US
09/598,042	9 July 2000 (09.07.2000)	US
09/620,312	19 July 2000 (19.07.2000)	US
09/653,450	3 August 2000 (03.08.2000)	US
09/662,191	14 September 2000 (14.09.2000)	US
09/693,036	19 October 2000 (19.10.2000)	US
09/727,344	29 November 2000 (29.11.2000)	US

## (63) Related by continuation (CON) or continuation-in-part (CIP) to earlier applications:

US	09/488,725 (CIP)
Filed on	21 January 2000 (21.01.2000)
US	09/552,317 (CIP)
Filed on	25 April 2000 (25.04.2000)
US	09/598,042 (CIP)
Filed on	9 July 2000 (09.07.2000)
US	09/620,312 (CIP)
Filed on	19 July 2000 (19.07.2000)
US	09/653,450 (CIP)
Filed on	3 August 2000 (03.08.2000)
US	09/662,191 (CIP)
Filed on	14 September 2000 (14.09.2000)
US	09/693,036 (CIP)
Filed on	19 October 2000 (19.10.2000)
US	09/727,344 (CIP)
Filed on	29 November 2000 (29.11.2000)

(71) Applicant (for all designated States except US): HYSEQ,  
INC. [US/US]; 670 Almanor Avenue, Sunnyvale, CA  
94086 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): TANG, Y., Tom  
[US/US]; 4230 Ranwick Court, San Jose, CA 95118 (US).

LIU, Chenghua [CN/US]; 1125 Ranchero Way #14,  
San Jose, CA 95117 (US). ASUNDI, Vinod [US/US];  
709 Foster City Boulevard, Foster City, CA 94404 (US).  
CHEN, Rui-hong [US/US]; 1031 Flying Fish Street,  
Foster City, CA 94404 (US). MA, Yunqing [CN/US];  
280 W. California Avenue #206, Sunnyvale, CA 94086  
(US). QIAN, Xiaohong, B. [CN/US]; 3662 Tumble Way,  
San Jose, CA 95132 (US). REN, Feiyan [US/US]; 7703  
Oak Meadow Court, Cupertino, CA 95014 (US). WANG,  
Dunrui [CN/US]; 932 La Palma, Milpitas, CA 95035  
(US). WANG, Jian-Rui [CN/US]; 744 Stendhal Lane,  
Cupertino, CA 95014 (US). WANG, Zhiwei [CN/US];  
836 Alturas Avenue, B36, Sunnyvale, CA 94085 (US).  
WEHRMAN, Tom [US/US]; 3210 CCSR Mol Pharm,  
269 W. Campus Drive, Stanford, CA 94305 (US). XU,  
Chongjun [CN/US]; 4918 Manitoba Drive, San Jose, CA  
95130 (US). XUE, Aidong, J. [CN/US]; 1621 S. Mary  
Avenue, Sunnyvale, CA 94087 (US). YANG, Yonghong  
[CN/US]; 4230 Ranwick Court, San Jose, CA 95118  
(US). ZHANG, Jie [CN/US]; 4930 Poplar Terrace, Camp-  
bell, CA 95008 (US). ZHAO, Qing, A. [CN/US]; 1556  
Kooser Road, San Jose, CA 95118 (US). ZHOU, Ping  
[CN/US]; 1461 Japaul Lane, San Jose, CA 95132 (US).  
GOODRICH, Ryle [US/US]; 4896 Sandy Lane, San Jose,  
CA 95124 (US). DRMANAC, Radoje, T. [YU/US]; 850  
East Greenwich Place, Palo Alto, CA 94303 (US).

(74) Agent: ELRIFI, Ivor, R.; Mintz, Levin, Cohn, Ferris,  
Glovsky, and Popeo, P.C., One Financial Center, Boston,  
MA 02111 (US).(81) Designated States (national): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,  
DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,  
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,  
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,  
TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.(84) Designated States (regional): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian  
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European  
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,  
IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF,  
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES

(57) Abstract: The present invention provides novel nucleic acids, novel polypeptide sequences encoded by these nucleic acids and  
uses thereof.

WO 01/53312 A1